

**Structural FAC  
Teleconference Minutes  
13 November 2002**

1. **Participants:** The following participated in this month's meeting:

Lori Taylor (MVP)	Jean McGinn (HQ)
John Tankosh (LRP)	
Andy Harksness (LRP)	
Mike Guldemon (SWF)	
Ed Schilling (MVK)	

2. **Meeting Notification:** Meeting notification will be sent to all Structural POC's as well as FAC members from now on. Hopefully this will increase participation so we can meet the needs of all the districts.

3. **Additions to the Structural Details Library:** A number of details were completed last FY, but due to funds availability and year end limitations, review was not performed. A handful of details, which were reviewed were sent forward and are included in the detail library. Funding of detail library work for this FY will be voted on at the Corporate Staff meeting on 19 November. As a member of the Corporate Staff, Jean will do her best to get this project is funded. (*\$25K was requested for this FY*)

4. **Structural Website:** We are having a problem getting the updated (corrected) version of the Structural Website from the contractor. The AMEC office that was contracted to develop our site indicated they have completed making the required changes, but have failed to deliver the product. Due to the non-responsiveness of the AMEC office performing the work, an email was sent to a Minneapolis AMEC representative requesting assistance. **Action Item:** *Jean will check with Elias Arredondo to see what payments have been made to the contractor.*

5. **A/E/C Standard Implementation:**

- a. Additional Structural Level Tables for Civil Works (Flood Control/Navigation) Projects: The group discussed the need for additional levels for projects in the civil works arena. The Non-Building Structures level table works well for small projects, but is not sufficient when producing drawings for more complex structures such as locks and dams. It was felt that the group should concentrate on developing a level table for use with MicroStation V8, since it allows unlimited level names. LRP has submitted a level table, which is set up by material type and then feature type. For example:

Concrete	Steel
S-CONC-WALL	S-STEL-BEAM
S-CONC-BEAM	S-STEL-RBAR
S-CONC-PIER	S-STEL-LADD
S-CONC-ABUT	S-STEL-SPPT

Participants felt that this was a better avenue to follow with regard to civil works projects. If additional levels are needed for more complex drawings, a user-defined subgroup could be added to the level name (i.e., S-CONC-WALL-MON1 [*Structural Concrete Wall, Monolith 1*]). This hierarchal method would allow the user to determine the complexity of the level structure based on project needs. This method would also be better suited for drawing 3D objects. We could potentially only need a single level table when using MicroStation V8. **Action Items:** *Everyone should start thinking about their District's specific needs so they will be ready to provide input.*

*Lori will (1) look at LRP's Structural level table to make sure Major/Minor/Sub groups of the level names are in compliance with National CAD Standard naming convention, (2) contact Scott Flanagan to see what he has developed, (3) contact John Kincaid to determine if our efforts are consistent with what is being developed for the EGIS, (4) contact Huntington District to see how they are using the existing tables, (5) complete and distribute draft of the level table to districts for review/discussion.*

- b. 3D Modeling: Discussed the need determine what changes/additions need to be made to the A/E/C CADD Standard in order to facilitate the use of 3D modeling. With software advancements (MicroStation V8), the use of 3D structural models is becoming more feasible. The use of 3D models could potentially reduce errors and review time because the user would only have to create a single object rather than several views of that object. This will be a focus area for the group this FY. **Action Item:** *Everyone should start thinking about 3D model development procedures, cell requirements, MDL requirements, etc., that we need to consider for inclusion in the A/E/C CADD Standard.*
  - c. Doctools Enhancements: Doctools is an MDL developed for the Corps that places "smart" section cuts and view titles. This tool is currently being modified to so that a subtitle can be placed in the view title, view titles can be back referenced to the sheet from which the view was taken, and view titles and cut/detail symbols will be hot-linked to each other within MicroStation. A draft version of this utility (for MicroStation V8 and J) is anticipated within the next week or so. Once received, the draft version will be sent to all districts for review/comment.
  - d. File Manager Enhancements: File manager is a tool contained within the A/E/C Workspace that automates file naming and management. This utility is being modified so that it works independent from the Workspace and loads automatically when the user creates a new file, renames a file or performs a "Save As" command. Districts will be able to configure a unique 20-digit project code for each drawing (currently the utility limits the user to a single 20-digit project code for the project). Since the project code field is user defined, this should solve problems districts are encountering when trying to satisfy internal needs. The tool is also being enhanced so that it synchronizes sheet references in Doctools. A draft version of this utility (for MicroStation V8 and J) is anticipated within the next week or so. Once received, the draft version will be sent to all districts for review/comment.
  - e. NetSPEX: NetSPEX is a utility developed by Prosoft that automates A/E/C Standard implementation. It is reasonably priced and easy to use, customize, and administer. St. Paul District has purchase this software and hopes to have it installed in December. The CADD/GIS Technology Center is looking at purchasing a number of licenses for Corps-wide use. Further information can be obtained at <http://www.prosoftnet.com>.
  - f. Sheet Reference Numbers (A-101, A-102, S-001, S-002, etc.) were discussed. These numbers work great for assembling drawing packages for buildings, but they do not work well for civil works projects when Districts want to group the drawings by reach or feature. **Action Item:** *Everyone should start thinking about how we can address this problem and make clarifications/changes to the Standards to resolve this issue.*
6. **Drafting Standards/Practices**: The need for a Corps drafting standards/practices guide was discussed. It would provide guidance on non-CADD related procedures like note and dimension placement, stationing layout for roads, navigation and flood control projects, view organization, etc. Some of these items are addressed in the National CADD Standard; however, use of the National CADD Standard is not mandated, and not everyone has a copy

of it. Rock Island has an old document that we could use as a starting point. **Action Item:** *Everyone should start thinking about items to be included, and whether this should be a stand-alone document or included as an appendix to the A/E/C CADD Standard.*

6. **Metriation Guidance Development:** No discussion.
7. **Next Meeting:** The next conference call will be held at 1:00 p.m. CT on 11 December. Anyone wishing to participate is welcome. The phone number is 1-877-950-3978, and the pass code is 180216.